

## Evans, Diane

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**From:** Evans, Diane  
**Sent:** Thursday, January 23, 2014 10:38 AM  
**To:** Michael Pfeil  
**Subject:** Akzo WER

Hi Mike,

I had to start with a fresh email in order to paste the table below. I think everything is fine - the statistic printouts include the correct information on concentrations and survival.

I have a couple of minor comments on the summary table in Lial's message.

As you know, the final WER depends on how many digits you keep in the LC50s and the individual WERs. Using the values on the revised table in Word (and my trusty calculator), I get a final WER (probit) of 1.051, rather than 1.045 (both round to 1.05, of course). The TSK final WER is 1.056. But they may have used a spreadsheet and rounded for the Word document.

In the Word table the round 1 probit WER for dissolved is actually 0.1699, rather than 0.167. I'm not sure if they meant to round to 0.17, which bumps up the final WER to 1.052

And if I use the significant digits that were included on pages 4-7 of the original report (for rounds 1-4), I also get slightly different values. I modified one of the Excel files in the original report – with corrections for Round 2 highlighted in red. (For some reason, the original Excel table also included different values for round 3. I didn't investigate that, but used the values we had already checked for Round 3 and are included in the revised Word table).

		R1	R2	R3	R4	Geomean
TSK	Dissolved	1.15	0.8527	1.0607	1.1931	1.0555
	<b>Total</b>	<b>1.4426</b>	<b>1.7714</b>	<b>2.4929</b>	<b>1.7039</b>	<b>1.8151</b>
Probit	Dissolved	1.1699	0.8374	1.0633	1.1772	1.0523
	<b>Total</b>	<b>1.4682</b>	<b>1.7517</b>	<b>2.5269</b>	<b>1.6706</b>	<b>1.8152</b>

None of these minor differences in the calculations should make any difference in the permit limits, so whichever value you want to include in the official letter should be fine.

Since the WERs for total zinc are larger values, I think it would be good to include both total and dissolved WERs in the official letter and I'll do the same for EPA's approval. I'm not sure if they would want to use the total WER for permitting (w/o the partitioning coefficient), but it would be easier to document both total and dissolved WERs in the same action.

If you caught anything that I should look closer at, just let me know.

Diane